SECTION VIII.
Engineering Prime Contracts

Unlike construction prime contracts, ITD and other public and private sector agencies typically select prime consultants for engineering contracts based on qualifications instead of just price. This presents a different set of potential barriers to MBE/WBE and small business participation as prime consultants on engineering and related work.

Qualitative Information on Prime Contracting in the Transportation Engineering Industry

BBC analyzed industry conditions and opportunities for transportation engineering-related work as prime consultants on ITD projects.

Public sector versus private sector work. Some engineering firms interviewed in this study indicated success obtaining work with ITD, other public sector entities and private sector clients. This includes MBE/WBEs and majority-owned firms.

Recently, the volume of engineering-related work has declined at ITD. As a result, firms are competing for a "shrinking pie" of ITD work.

Avenues to receive ITD transportation engineering-related prime contract work. ITD typically procures engineering services through a multi-step, qualifications-based procurement processes. Important parts of this system include:

- Licensing;
- Learning of the ITD opportunities;
- Pre-qualification for on-call work;
- Selection for a task order; and
- Qualifications-based selections for larger or unusual engineering-related contracts.

The study team's review of ITD's selection processes, and interviews and surveys with businesses owners and trade associations identified a number of barriers to obtaining work as a prime consultant.

Licensing. Firms conducting transportation engineering services for ITD must have the appropriate licenses.

Information on engineering work. As discussed in Section VII, ITD provides information on upcoming RFPs, and advertises in general how to get on the term agreement list. There is less information about upcoming engineering work than for construction contracts. Some firms recommended that ITD provide better information about upcoming engineering work (specific comments noted in Section VII).

Pre-qualification/term agreements. ITD issues term agreements for engineering-related work for firms pre-qualified for such work. Term agreements are for two years up to $750,000. ITD selects consultants for each area of service based on an RFQ process. ITD considers factors such as quality control, personnel, resources and understanding of requirements. Up until 2006, ITD would solicit qualifications statements once every two years. Beginning in 2006, consultants can submit qualifications at any point in the year.

Once a firm has a term agreement, ITD districts and local agencies can choose it for engineering work without further competition. ITD and the firm will negotiate a scope of work, man-day estimates, professional fees and total budget. Lists of pre-qualified consulting engineers are circulated through ITD and local agencies. Pre-qualification in no way ranks these firms for ITD use.

Task orders can be for work up to $250,000. There is a $750,000 limit on total work for a firm under a term agreement (local agency work does not count against this limit). Firms can exceed $750,000 in total work tasks with Board approval. (The $750,000 figure is Board policy. Exceeding the $750,000 limit has happened for only three or four firms.) Additional information on ITD's process for selecting firms for term agreements is provided at the end of this section.

Some consultants gave feedback on the term agreement process:

- One WBE firm reported that it is "not very difficult" to get on the term agreement list. She contrasted ITD's process with the Idaho Department of Public Works, which she says is more difficult. However, she said that she has received more work off the DPW list because the number of providers is smaller than the ITD list.
- Another WBE firm stated that it is difficult to get on the list. She reported a "catch-22 situation" where you cannot get on the list if you do not have the experience, but you cannot get the experience if you are not on the list.
- One firm reported that it was important to rank staff experience rather than firm experience. She indicated that larger engineering firms still list project qualifications even though she employs the staff who performed that work.
- A WBE firm suggested that ITD increase the $250,000 monetary cap on the use of task orders so that it could do more work with firms from the term agreement list.
- An MBE consulting firm reported that the ITD process is fair, but that he had difficulty being approved for the list when he first started his business.
- One minority-owned firm indicated that the firm had a term agreement but had not received any work. This firm reported the process as "a lot of paperwork to submit … questions, qualifications and references."
- Several majority-owned firms interviewed stated that it was not difficult to get on the ITD list. One firm reported cited its "good working relationship" with ITD as a reason it was easy for the firm to be pre-qualified.
- A WBE engineering firm noted that being on the list just opens the door to opportunities rather than guarantee them. "I have to work relationships with heads of various departments. You have to do your homework."

Several MBE/WBEs stated that it would help if smaller projects could be reserved for small businesses (or DBEs). "If they would at least give you even small projects that were just testing projects, say 'okay, you're starting out, let's see what you can do.'" One interviewee suggested carving out certain disciplines from a larger contract so that the work could be performed by small, local firms.

Qualifications-based selection for larger or unusual engineering contracts. Some engineering work is either too large to be handled through the term agreement process or is outside the disciplines encompassed by existing term agreements. ITD issues professional agreements for these projects.

Professional agreements are awarded through a qualifications-based Request for Proposals (RFP) process that is similar to the term agreement process. The major differences for selecting consultants for professional agreements is that ITD will evaluate the entire consulting team, including subconsultants, and that firms awarded a professional agreement can be reasonably assured of conducting the work (the term agreement process does not guarantee any work). As with term agreements, ITD does not consider price when evaluating proposals for professional agreements.

Presence of "good old boy network" and other barriers. Several engineering-related firms reported that they had seen the good old boy network at work in ITD.

- One MBE stated that the good old boy network is cultural and includes people who have been in Idaho for a very long time.

- A representative of a minority trade association indicated that ITD project selection committees need to be diversified. According to this interviewee, the selection committee is all "the good old boy." "They're going to use their friends and the people they know …."

Other interviewees saw potential favoritism at ITD, but that it could not be attributed to a good old boy network.

- A WBE stated that there is a good old boy network in the industry but not with ITD. She did add, "that is human nature to go where you are comfortable."

- One majority-owned firm said that there were a few times that other firms had beaten them out due to personal connections with ITD staff. "They're nice people, we work with them, but they have favorites." Nevertheless, this interviewee did not attribute this to a good old boy network in the Idaho transportation industry.

A representative of an MBE consulting firm stated that when he worked for ITD he heard certain ITD employees make ethnic comments and jokes and use negative terms to refer to certain groups. However, he does not believe this affected DBE firms' ability to obtain work. He has not heard such comments in the last ten years.

An MBE engineering firm stated that some bids were targeted to certain firms. "You can tell if something is targeted for somebody." However, she was not sure that she had seen this on an ITD contract.

A WBE engineering firm reported that women and minorities have to "scrap" and be more aggressive because the industry favors large, national firms. She stated "it does not play well for small DBEs." She has had difficulty entering the Idaho transportation industry.

ITD reimbursement and payment. One majority-owned firm reported that ITD does not consider cost in the competition for work, but then will approve or reject hourly rates submitted by the consultant. He is discouraged from doing work for ITD because the Department is "not doing their homework" in keeping up with market rates for his services.

A minority-owned firm reported that he likes working with the people at ITD but that "we get hammered a lot more than the big guys do" when negotiating projects. It's like we are so small they can beat us up more …."

Location. One MBE consultant who was based outside of Boise reported ITD favoritism towards Boise-based firms.

Prompt payment. Some consultants reported slow payment in the public sector.

MBE/WBE Utilization as Prime Consultants

BBC examined utilization of minority- and women-owned firms as prime consultants to ITD engineering and related projects.

Federally-funded and state-funded prime contracts. Including individual task orders issued off of term agreements, engineering-related prime contracts accounted for 961 federally-funded contracts and 160 state-funded contracts from 2002 through 2006. MBE/WBEs received about 3 percent of the prime contract dollars for both federally- and state-funded contracts. Certified DBEs received most of the dollars going to minority- and women-owned firms. Figure VIII-1 presents these results.

Figure VIII-1.
MBE/WBE share of prime contract dollars for transportation engineering contracts, federal vs. state funding, 2002-2006

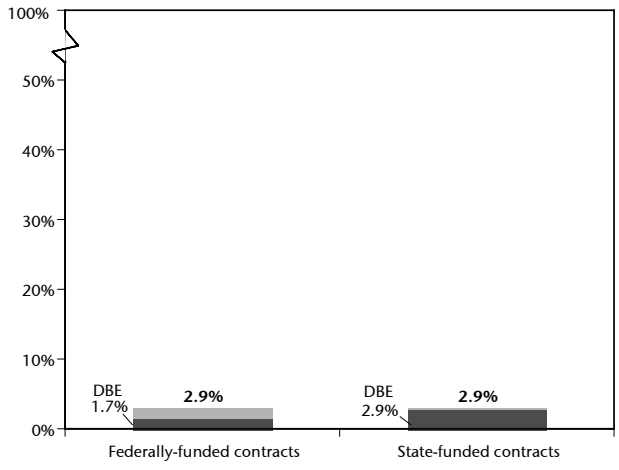
Note:

For more detail and for results by MBE/WBE group, see Figures E-59 and E-101 in Appendix E.

961 federally-funded and 160 state-funded contracts, including task orders off of term agreements.

Source:

BBC Research and Consulting from data on ITD contracts.



Utilization of firms by race and gender group. BBC also explored the share of prime contract dollars going to each MBE/WBE group for federally- and state-funded engineering-related contracts. Figure VIII-2 shows that firms owned by white women, Hispanic Americans and Native Americans accounted for nearly all of the MBE/WBE utilization as prime consultants on ITD engineering contracts.

Figure VIII-2.
DBE and MBE/WBE share of federally- and state-funded prime contract dollars for transportation engineering contracts, by race/ethnicity/ gender, 2002-2006

Note:

Numbers rounded to nearest tenth of 1 percent.

For more detail, see Figures E-59 and E-101 in Appendix E.

961 federally-funded and 160 state-funded prime contracts, including task orders off of term agreements.

Source:

BBC Research and Consulting from data on ITD contracts.

	Federally-funded contracts	State-funded contracts
MBE/WBEs		
African American-owned	0.0%	0.0%
Asian-Pacific American-owned	0.1	0.0
Subcontinent Asian American-owned	0.0	0.0
Hispanic American-owned	0.6	0.6
Native American-owned	0.2	1.0
Total MBE	**0.9%**	**1.5%**
WBE (white women-owned)	2.0	1.4
Total MBE/WBE	**2.9%**	**2.9%**
DBEs		
African American-owned	0.0%	0.0%
Asian-Pacific American-owned	0.0	0.0
Subcontinent Asian American-owned	0.0	0.0
Hispanic American-owned	0.5	0.6
Native American-owned	0.0	1.0
Total MBE	**0.5%**	**1.5%**
WBE (white women-owned)	1.2	1.3
White male-owned DBE	0.0	0.0
Total DBE	**1.7%**	**2.9%**

Disparity Analysis

The study team compared percentage utilization with availability for engineering prime contracts and calculated disparity indexes for each MBE/WBE group. Across the board, MBE/WBEs received only a small portion of the prime contracting dollars expected given their availability for this work.

Federally-funded and state-funded prime contracts. BBC identified large disparities in the utilization of MBE/WBEs as prime consultants for both federally- and state-funded engineering contracts. There were disparities between the utilization and availability for white women-owned firms and for each minority group.

Figure VIII-3.
Disparity indices for MBE/WBE utilization on federally- and state-funded transportation engineering prime contracts, 2002-2006

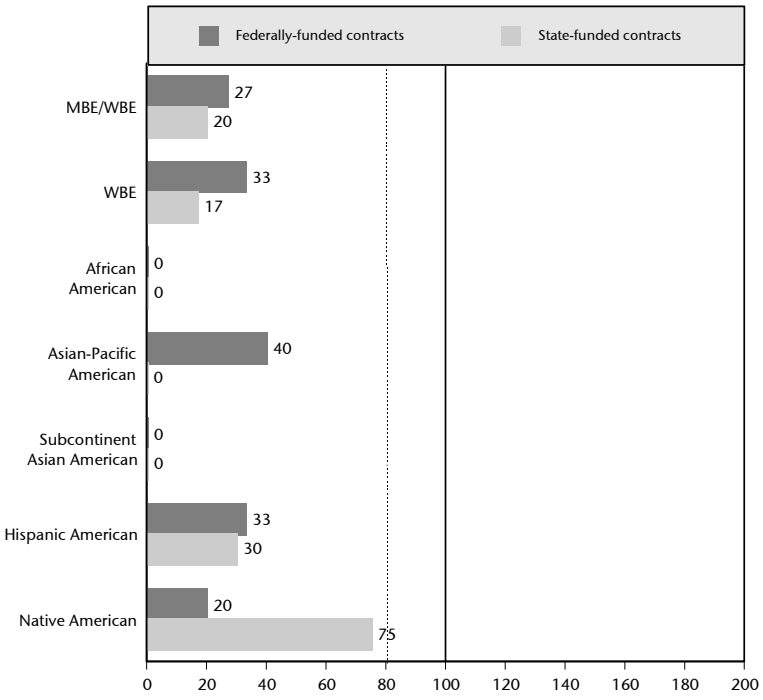
Note:

For more detailed information, see Figure E-59 and Figure E-101 in Appendix E.

961 federally-funded and 160 state-funded prime contracts, including task orders off term agreements.

Source:

BBC Research and Consulting.



BBC separately examined prime consultant utilization and availability for federally-funded contracts awarded through an RFP process for 2002 through January 2006, and other federally-funded prime contracts (typically task orders awarded off of term agreements).

BBC identified substantial disparities under both methods of contract awards. There were disparities for each MBE/WBE group except for Asian-Pacific American-owned firms for contracts awarded through RFPs. Disparities were somewhat more severe for prime contracts awarded through RFPs (the Asian-Pacific American-owned firm received one such contract out of the 60 examined for just 0.3 percent of the total dollars). MBE/WBE utilization for other federally-funded contracts was 4.7 percent. Figures E-68 and E-74 in Appendix E provide these results.

Results for small engineering prime contracts. BBC conducted separate disparity analyses of engineering contracts of $100,000 and below to determine if disparities persisted for these smaller contracts. As shown in Figure VIII-4, MBE/WBE utilization on small federally-funded engineering contracts was about 9 percent of prime contract dollars. MBE/WBE utilization on small state-funded contracts was 5.5 percent of prime contract dollars. MBE/WBEs obtain a larger share of prime contract dollars on small contracts than for all contracts (3 percent MBE/WBE utilization).

Figure VIII-4.
MBE/WBE share of prime contract dollars for transportation engineering contracts under $100,000, federal vs. state funding, 2002–2006

Note:

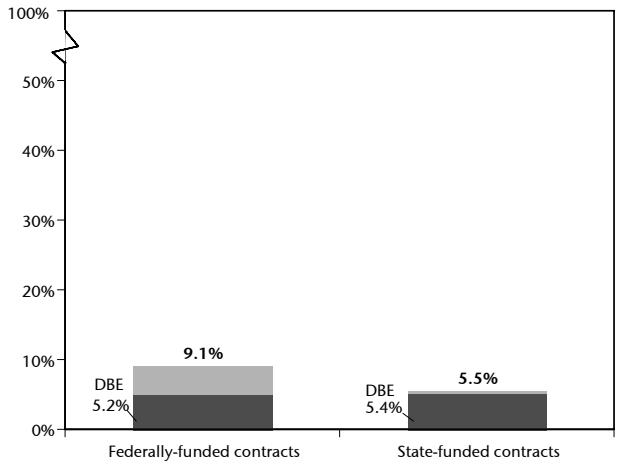
For contracts under $100,000, utilization based on dollars retained by the prime contractor after deducting subcontract dollars.

For more detail and for results by MBE/WBE group, see Figures E-146 E-149 Appendix E.

690 federally-funded and 141 state-funded prime contracts, including task orders off of term agreements.

Source:

BBC Research and Consulting from data on ITD contracts.



Even though MBE/WBE utilization was higher for this work, BBC identified substantial disparities between MBE/WBE utilization and availability for small engineering prime contracts. Figure VIII-5 shows disparities for each group for each set of small engineering contracts except for Hispanic American-owned firms for federally-funded contracts and Native American-owned firms for state-funded contracts.

Figure VIII-5.
Disparity indices for MBE/WBE utilization as prime contractors on federally- and state-funded transportation engineering contracts under $100,000, 2002–2006

Note:

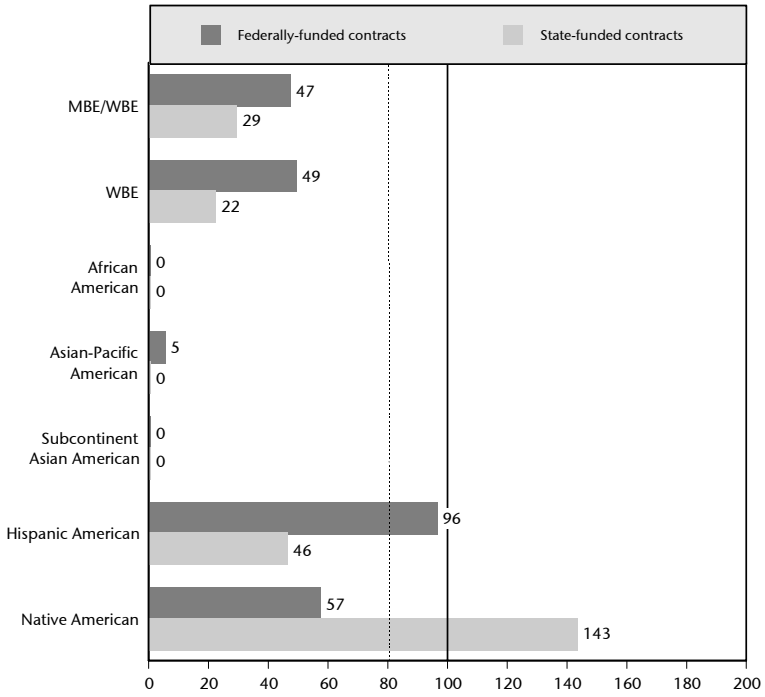
For contracts under $100,000, utilization based on dollars retained by the prime contractor after deducting subcontract dollars.

For more detailed information, see Figure E-146 and Figure E-149 in Appendix E.

690 federally-funded and 141 state-funded prime contracts, including task orders off of term agreements.

Source:

BBC Research and Consulting.



Analysis of ITD Proposal Processes

To explore why disparities may be occurring, the BBC study team examined ITD's term agreement and RFP processes. The objective of this analysis was to determine whether or not MBE/WBE firms appear to be advantaged or disadvantaged when competing as prime consultants.

Term agreement proposal process. ITD allows firms to submit proposals for about 60 term agreement categories. Prior to 2007, this occurred once every two years. In 2007, ITD gave roughly one-half of the firms on the 2005-2007 term agreement list a one-year extension. The other firms were required to submit proposals in 2007. ITD further changed this process to allow firms to submit proposals on a "rolling basis." The latest change resulted in the majority of firms being rated in a large batch, with several firms being rated independently after the first group had been rated.

Evaluation process. ITD staff evaluate proposals for each category, with one to four reviewers per category. Each proposal is rated on a 0-5 scale for four to five criteria. Typical criteria include quality control, personnel, resources and understanding of requirements. Price is not a factor in these evaluations. Comments explaining a chosen rating are recorded on evaluation forms where necessary.

There are no uniform criteria for the 0-5 rating system. While some evaluators have indicated a particular "cut off" point for acceptance of firms, there is no consistency in this number and few categories identify such a criteria.

Majority-owned firms and MBE/WBE firms go through the same evaluation process. DBE firms are not identified as such on the score sheet, but this is noted on the cover sheet required on each proposal. There are no points awarded for DBE status.

Results of the evaluation process. The BBC study team accessed all RFPs and evaluation forms for the term agreement processes in 2005 and 2007 (the Consulting Agreement Unit provided files). The study team reviewed every evaluation form for every firm proposing to be approved on the term agreement list in each of the 60 categories. The BBC study team noted the following information for each of 60 evaluated service categories of proposals for both 2005 and 2007:

- Number of proposals received;
- Number of proposals that were evaluated outside of the original batch (this is acceptable under the new process, but was tracked to determine whether this practice appeared to be advantageous or disadvantageous to proposing firms);
- Range of scores given the proposing firms;
- Qualifying score;
- Number of firms approved for the term agreement;
- Number of firms rejected for the term agreement;
- Number of DBE firms proposing;
- Number of DBE firms approved for the term agreement;
- Specific details about the DBE firm scores and which were approved or rejected; and
- Indication as to whether the study team's review of the evaluation of proposals raised questions about the consistency of the ratings, preference or bias against DBE firms, or preference or bias against firms proposing "out of batch."

In 2005, 170 firms proposed for at least one category of the term agreement list; 19 of these were certified DBE firms (11 percent of the total). DBEs represented 8 percent of the category proposals and 7 percent of the total awards within a category. The difference between the 7 percent DBE share of awards and 11 percent DBE share of firms participating is primarily due to DBEs proposing on fewer categories.

In the 2007 process, 82 firms proposed for at least one category of the term agreement list; 11 of these firms (13 percent) were certified DBEs. DBEs were 7 percent of category proposals and accounted for 6 percent of the category approvals.

Assessment of the 2005 and 2007 proposal reviews. DBE firms rated among the highest and lowest of all reviewed firms. There was no clear pattern of a DBE firm being approved without merit for a category, or denied without merit for a category. In fact, only two DBE firms were rejected for all categories for which they proposed. A review of their proposals substantiated these rejections.

In some cases where DBE firms were rejected for a category, it appeared that they did not possess the required experience or skills. These may be instances where DBE firms are trying to branch out but are not yet sufficiently qualified. This circumstance was not limited to DBE firms, however.

In other cases where DBE firms were rejected for a category, it appeared that they might not have understood the requirements of a category and/or did a poor job of presenting their proposal. This circumstance was not limited to DBE firms, however.

None of the written comments from the reviewers toward any of the proposing firms raises concerns of bias for or against DBEs. A few instances of inconsistent ratings were noted, but very few firms appeared to be advantaged or disadvantaged by this. ITD may wish to consider additional clarification for reviewers of criteria for scoring and minimum scores for each category to increase objectivity.

It appears that having prior experience with ITD may give a firm an advantage in scoring, but this advantage is shared between DBE and non-DBE firms. Occasionally reviewers agreed to give lower scoring DBEs the benefit of the doubt (i.e., when past experience was not strong but resources, personnel and understanding of the requirements were strong) and approve them on the list. However, this practice was not limited to DBEs and appears to have been consistently applied.

The practice of reviewing some proposals within a large batch and then reviewing other proposals individually as they are received does not seem to be creating any advantage for or against proposers. It appears that scoring for firms out of the batch period is not completely to scale with the scoring during the batch review, but there does not appear to be a pattern of firms being routinely advantaged or disadvantaged by this occurrence. ITD may wish to consider how to ensure that reviewers apply consistent scoring in the future when firms are rated individually instead of as a batch.

Professional agreements. The study team also analyzed ITD's professional agreement proposal and approval process. Professional agreements are typically awarded through Requests for Proposals (RFPs). ITD posts Requests for Technical Proposals, Statements of Interests, and information regarding specific scopes of work on its website. The required format for the responses is clearly identified. The documents are easy to understand.

Evaluation process. Approximately four to five ITD staff evaluates each submitted proposal. Each proposal is rated on a 0-5 scale for several criteria, including proposal format, project understanding, project manager, key personnel, location of work and communications, and quality control. Price is not a factor in these evaluations.

Assessment of the proposal reviews. The study team was able to access proposal files for 28 RFPs from 2002 through mid-2007. Between 2002 and 2005, bids were received from only one DBE firm (for two projects with one winning proposal). Between June 2006 and May 2007 three DBE firms bid as primes on a total of six out of 19 project solicitations. Each of the three firms was awarded one of the projects for which they bid as the prime consultant.

It appears that having prior experience with ITD may give a firm an advantage in scoring, but this advantage is shared between DBE and non-DBE firms. None of the written comments from the reviewers toward any of the proposing firms raises concerns of bias in any direction.

Conclusions

BBC offers the following conclusions concerning ITD engineering-related prime contracts.

1. Only 3 percent of prime consultant dollars on ITD engineering-related contracts goes to minority- and women-owned firms, substantially below what would be expected based on availability of MBEs and WBEs to perform this work. BBC identified large disparities for WBEs and each MBE group. The share of prime dollars going to MBE/WBEs is greater for small engineering-related contracts, but disparities still exist.

2. The process of selecting firms to conduct engineering-related work is subjective, however, ITD evaluations do not appear to unfairly disadvantage minority- and women-owned firms. A relatively large proportion of firms seeking term agreements were DBEs (11 and 13 percent for 2005 and 2007, respectively). Minority- and women-owned firms compete for fewer categories of ITD work under the term agreements. DBE firms competing for a category are about as likely to be successful as non-DBEs. Firms approved for term agreements still must market themselves within ITD in order to be chosen for task orders. This second step to obtaining work could be a barrier for firms without much experience with ITD. Minority- and women-owned firms are less likely to compete for contracts awarded through Requests for Proposals.

3. Several firms reported that it was difficult to learn of upcoming consulting opportunities at ITD.

4. A number of smaller firms indicated that it was difficult to compete for ITD work against large, established engineering firms that may operate nationally or internationally. This may be a growing concern as larger engineering firms may be competing with smaller firms for a declining volume of ITD engineering contracts.

5. ITD's past race- and gender-conscious programs related to engineering contractors primarily focused on subcontracting opportunities for DBEs. In the future, ITD may need to devote more efforts to directly developing MBE/WBE prime consultants.

BBC does not recommend reintroduction of the former DBE contract goals program as a remedy for the disparities identified for prime consultants on ITD projects. In addition to continuing current technical assistance, ITD should consider the following initiatives:

- ITD could provide intensive technical assistance to encourage proposals for term agreements from minority- and women-owned firms. ITD could also work with MBE/WBE firms to improve the quality of their proposals. ITD would review past unsuccessful and successful proposal submissions with MBE/WBEs as part of this training.

- In the scoring of firms for term agreements and RFPs, ITD could award points for firms that have not received prime work in a category but have a proven track record as a subconsultant.

- As discussed in Section VII, ITD could work to provide more advance information on upcoming engineering-related projects. In addition, ITD could assist MBE/WBEs that have won term agreements in marketing themselves across ITD.

- As presented in Section VII, ITD could consider soliciting proposals from teams of firms for particular categories of work awarded under term agreements so that smaller firms could leverage their capabilities through proposed team members.

- Mentor-protégé programs may also be effective for engineering prime consultants.